PREVENTION OF BLINDNESS
No. 2

CHILDREN WHO NEED NOT HAVE BEEN BLIND

PREVENTION A PUBLIC DUTY

NEW YORK CITY
289 FOURTH AVENUE

HV2330
.N49
1909

AMERICAN FOUNDATION
FOR THE BLIND INC.

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Five years old. Blind from birth.
Need not have been blind.

Gift of
A. M. Shotwell

NEW YORK ASSOCIATION FOR THE BLIND

SPECIAL COMMITTEE ON PREVENTION
OF BLINDNESS

PREVENTION OF BLINDNESS, No. 2

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PREVENTION A PUBLIC DUTY

JANUARY, 1909

NEW YORK CITY
289 FOURTH AVENUE

HV 2330
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THE NEW YORK ASSOCIATION FOR THE BLIND

ORGANIZED 1905 INCORPORATED 1906

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Room 50.

OBJECT OF THE COMMITTEE

"The object of this committee is to ascertain the direct causes of preventable blindness, and to take such measures in co-operation with the medical profession as may lead to the elimination of such causes."

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Hail, holy Light, offspring of Heav'n first-born!
* * * * * * thee I revisit safe,
And feel thy sov'reign vital lamp; but thou
Revisit'st not these eyes, that roll in vain
To find thy piercing ray, and find no dawn.
* * * * * * Thus with the year
Seasons return, but not to me returns
Day, or the sweet approach of ev'n or morn,
Or sight of vernal bloom, or summer's rose,
Or flocks, or herds, or human face divine;
But cloud instead, and ever-during dark.

Paradise Lost.

CHILDREN WHO NEED NOT HAVE BEEN BLIND

PREVENTION A PUBLIC DUTY

OPHTHALMIA NEONATORUM.

It is an astounding fact, one not generally known, that ONE-QUARTER OF ALL THE BLIND CHILDREN IN ALL THE BLIND SCHOOLS OF THIS COUNTRY ARE UNNECESSARILY BLIND.

These children have been doomed to lifelong darkness because at the time of their birth their eyes were not properly washed and treated by the attending physician or midwife.

There is no excuse for such negligence. On the part of the physician it is due to carelessness; on the part of the midwife to carelessness or ignorance.

The disease is known as Ophthalmia Neonatorum, or Ophthalmia of the New-Born, or Infant Ophthalmia. It is an infectious disease, appearing at the time of birth, easily preventable if precautionary measures are taken at once, or within a few hours after birth; curable, if when it develops skilled medical treatment can be secured quickly; fatal to sight if prompt preventive and curative measures are not taken, and ending in total blindness through the destruction of the eyeballs.*

In the year 1906 there were 183,012 registered births in the State of New York, the disease appearing in one out of every 200 of these births—evidence of the alarming prevalence of the disease.

Twenty-eight years ago, in 1881, Prof. Credé of Leipsic, Director of the Maternity Hospital connected with the University, announced the important discovery that a 2 per cent. solution of nitrate of silver dropped, a single drop, into each eye of a new-born infant, would destroy the germs of Ophthalmia Neonatorum where

*It should be understood that this paper deals throughout solely with Ophthalmia Neonatorum. Were other causes of preventable blindness to be included, the percentages would be higher. The illustrations are all of children made blind by Ophthalmia Neonatorum.

these existed, and would not injure the sight of healthy eyes. Credé's figures show surprising results. In 1880, just before and just after the application of his newly discovered preventive measure, the percentage of Ophthalmia fell from 7.4 per cent. (14 cases out of 187 births) to 0.5 per cent. (one case out of 200 births—and in this one case the disinfectant had not been used). Later he reports that out of 1,160 births during the three years, 1880—1883, but one case of infant ophthalmia had developed—possibly two.*

The value of this great discovery is now a fact accepted by all physicians. All obstetricians, all physicians of standing, now use nitrate of silver, or derivatives of the silver salts, in confinement cases, for the eyes of the new-born infant. It is regarded by them as a matter of course, as part of their routine practice—and many a physician who reads this paper will be as much surprised and horrified at the statement with which it opens as is the unscientific layman. Such neglect and ignorance are to them inconceivable and inexcusable.

The official census of the blind for the State of New York, taken in 1906, gives a total of 6,200 blind persons in the State. Of these, the cases of preventable blindness number 1,984, or 32 per cent. of the whole. And, of these preventable cases, there are 620 classified as blindness caused by Ophthalmia Neonatorum, or 10 per cent. of the whole number of blind persons in the State of New York.

This means that to-day there are over 620 blind persons in this State who would never have been blind had a harmless preparation been put into their eyes when they were born.

It means that many who have spent their lives in darkness, distress, often despair, need not have been so afflicted; that children who have never known what it is to run about in the sunshine, to see birds, and flowers, and grass and trees, to look into the faces of father and mother, might have *seen,* might have had the clear, bright eyes of other merry active children had it not been for somebody's carelessness on the day that they were born.

*Sydney Stephenson, M. B., C. M. "Ophthalmia Neonatorum, with especial reference to its causation and prevention." Pp. 162-163. (The Middlemore Prize Essay of the British Medical Association 1907.) George Pulman & Sons, London, 1907. One of the latest and best authorities upon this subject.

Accompanying this paper are a few photographs taken from the report of the New York State Commission for the Blind of 1906. The pictures are nearly all of children in the New York State School for the Blind at Batavia, N. Y., and in the Sunshine Home for Babies, Brooklyn, New York.

Notice, on page 31, the little boy in white jacket and broad tie, with hair neatly parted. He has a finely shaped head, no lack of intelligence there! Fancy the bright eyes and animated expression of an active boy of that age. Look at this child—the sightless globes, the drooping mouth! Under the picture is written "Blind from Ophthalmia Neonatorum—a typical case of total blindness which proper care could have easily averted."

On another page there are five children, three little boys and two little girls. Those sightlesss eyes! Underneath is written, "Out of twenty-two new pupils registered in the State School at Batavia at the time this picture was taken, January 23rd, 1906, these five are victims of Ophthalmia Neonatorum. Proper care at the proper time would have saved their sight, an inestimable boon to themselves and of great economic value to the State" (page 29).

We turn to another picture, of a little boy and girl five and six years old, entitled "Playing on the Beach."

Where are the little pails and shovels; the little sand forts, built to be demolished; where the running down the wet sand to meet the incoming wave, the hasty retreat with screams of delight; where the breathless chasing of each other up and down the beach? Instead, the little boy sits astride a log, motionless, one hand raised to his drooping head, the other hanging listlessly by his side. He is dressed in sailor jacket, and his legs are bare from the knee down—dressed like those other children who are wading and running about and doing the things he cannot see, the things he cannot do. Is he thinking of this? Near him is a little girl, stretched out full length upon the sand. Her curly head is raised, she faces the ocean she does not see, but she hears the waves and she feels the cool breeze and loves the warm sun. Is she listening to the merry cries of the other children? Does she long to be with them?

The inscription reads: "Playing on the Beach." "Both Unnecessarily Blind" (page 27).

Of the more than 64,000 blind persons in the United States, it is estimated that between 6,000 and 7,000 are totally blind because a simple precaution was not taken at the time of their birth.

The following table shows the number of new pupils admitted into ten of the principal schools of this country during the year 1907, and the proportion of those admitted who had lost their sight from Ophthalmia of the New-Born.

1907.

Schools for the Blind.	New Admissions.	Ophthalmia of New-Born.	Per Cent.
N. Y. State School for the Blind, Batavia, N. Y.	13	4	30.7
Penn. Institute for the Blind, Overbrook, Pa.	27	9	33.33
Perkins Institute and Mass. School for the Blind, Boston, Mass.	43	13	30.00
Colorado School for the Blind, Colorado Springs, Col.	7	3	42.80
Western Penn. Institute for the Blind, Pittsburgh, Pa.	28	8	28.57
Missouri School for the Blind, St. Louis, Mo.	19	6	31.57
Conn. State Board of Education for the Blind, Hartford	8	1	12.50
Ohio State School, Columbus	61	6	9.83
Maryland School for the Blind, Baltimore.	13	4	30.77
Ontario Institute for the Blind, Brantford, Ont.	23	5	21.74

The average of new admissions in these ten Schools for the Blind shows that 25.21 per cent. were victims of Ophthalmia of the New-Born.

One quarter of the new pupils admitted during 1907 were therefore *needlessly blind.*

The following table shows the admissions for eight years, 1900-1907, to one school, the Pennsylvania Institute for the Blind, at Overbrook, Pa., and the percentage of pupils admitted each year who had lost their sight from Ophthalmia Neonatorum.

PENNSYLVANIA SCHOOL FOR THE BLIND.

Year.		*Per Cent.*
1900	11 out of 25	= 44
1901	10 out of 26	= 38
1902	9 out of 39	= 23
1903	14 out of 50	= 28
1904	15 out of 56	= 26
1905	21 out of 42	= 50
1906	12 out of 38	= 31
1907	9 out of 27	= 33⅓

Average for eight years 33⅓ per cent. needlessly blind.*

We read these statistics and ask, with concern, what explanation can be offered? Why should this form of blindness, so easily prevented, continue, year after year, to send its little victims to the State Schools for the Blind, with but little if any diminution in their number? What is the explanation?

One might suspect ignorance. But it is now twenty-eight years since Prof. Credé's discovery; its value since then has been so tested and proved that it is no longer in question; the principle upon which it is based has been recognized and adopted by the medical profession as an accepted fact; instruction concerning it belongs to the curriculum of all medical colleges in this country and in Europe; its application forms part of the practice of all physicians of standing. The plea of ignorance on the part of the medical profession is not tenable.

Were the prescribed treatment of a nature so difficult and delicate that the skill of a specialist could alone cope with it, this would account for many cases, for oculists are rarely obtainable on short notice in remote villages or on distant farms.

Mercifully, this is not the case. The preventive measure is within the capacity of every physician, of every intelligent midwife. It consists simply of the careful washing of all infants'

*These tables are taken from the report of the Committee on Ophthalmia Neonatorum to the House of Delegates of the American Medical Association, Chicago, June, 1908.

eyes directly after birth, the dropping into each eye of a small portion of an inexpensive solution, obtainable from all druggists, harmless to healthy eyes, destructive of certain germs in diseased eyes—the one application. Just this simple treatment, nothing more, a treatment known to all physicians and presumably to all midwives.

We are inevitably led to the conclusion that to the criminal carelessness or ignorance of those who preside at the birth of the child is due the loss of sight of almost every child whose eyes have been destroyed by Infant Ophthalmia. They, and they alone, are directly responsible for the blindness of the many little children, the many men and women who, for all their lives, must grope their way through a world of darkness.*

MIDWIVES.

With the advent to our shores of a vast number of foreigners, they have naturally brought with them, especially noticeable in our large cities where they congregate, their manners and customs. Among these is the employment of midwives, a custom which has come down from the ages and is of almost universal adoption in Austria, Germany and Italy. In these countries women who practice midwifery are obliged to take regular courses of instruction, must pass stringent examinations and be of assured good character, before they can be licensed and registered, a license revokable at any time, a registration to be renewed annually; and when practising, they are under constant Government supervision.

Here, although they are largely employed, especially by foreigners, no adequate provision, with rare exception, is made for the examination of midwives before licenses are granted and registration allowed, as there should be, by Departments of Health or by authorized Boards of Examiners.†

*Detailed directions for care of the eyes at birth will be found in the Appendix, page 25.

†Of the 60 counties of New York State, there are legally constituted Boards of Examiners in Midwifery for three counties only, those of Erie, Niagara and Chautauqua; and for the City of Rochester. The Health Department of New York City has power to conduct examinations.

They are under no supervision when practising, however ignorant they may be; there are no safeguards for those they serve. Is it to be wondered at that the standard of fitness among the trained foreign midwives who come to this country is soon lowered, or that grossly incompetent, untrained women are to be found on the registry lists—where it is so easy for them to get.

In Chicago, in 1904, we find 86 per cent. of all births, principally among Italians, reported by midwives. In Buffalo, N. Y., with a population of about 400,000, nearly one-half of the births, in one year, were attended by midwives. In New York City, in 1905, 43,834 births, or 42 per cent. of the whole number, were attended by midwives, employed largely by Italians, Austro-Hungarians, Polish Jews and other immigrants. For the year 1907, in New York City, there were 68,186 births reported by physicians, and 52,536 reported by midwives. In September, 1908, the registered midwives in the five Boroughs of New York City numbered 1,382.

In the face of these figures it is idle to talk of the elimination of the midwife. "It is a condition not a theory which confronts us." And, as a practical people, let us accept the condition and master it, not let the condition master us. Let us see to it that our midwives are trained, controlled and made fit for the responsible duties they undertake to perform. This we owe to the thousands of mothers and children whose lives and health are in their keeping.

Students of this subject are referred to a very able and valuable report, made, in 1906, by Miss F. Elizabeth Crowell, a graduate nurse, to the New York Association of Neighborhood Workers.*

Miss Crowell examined 10,000 certificates of births, and personally interviewed in their homes 500 midwives, or over one-half of those practising at that time in the Borough of Manhattan, New York City. She says:

"Classifying according to nationality, I found that out of the 500 midwives, 27 per cent. were Austro-Hungarians, Bohemians, Austrian-Poles; 25 per cent. Italians; 22 per cent. Germans; 14 per cent Russians; that 4 per

*Published in full in "Charities and The Commons," January 12, 1907.

cent. were born in the United States; 2 per cent. in Ireland, and the remaining 6 per cent. were made up of natives from France, Sweden, Switzerland, England, Scotland, Syria, Turkey, Holland, Belgium, Denmark, Buenos Ayres, and one West Indian negress." * * *

"The homes of these midwives are to be compared with the homes of the women upon whom they attend, the average three-room tenement—clean or dirty, according to the personal habits of the midwife who occupies it. Of the midwives' homes, 106 were absolutely filthy, as was the clothing and the person of the midwife herself. Of the remaining 394, I should say one-third might be designated as excellent, the other two-thirds fair." * * *

"As for the bags and their equipment, from a professional standpoint by far the greater number would make fit decorations for a chamber of horrors. Rusty scissors, dirty string, a bit of cotton, a few corrosive sublimate tablets, old rags and papers, some ergot and vaseline, a gum catheter, wired, were the usual contents. Out of 303 bags inspected, thirty-four only were marked as first-class—that is, they were clean and their equipment was complete and sterile.

"I was visiting one Italian midwife whose home was of the dirtiest, the condition of whose hands were indescribable, whose clothing was filthy, the condition of whose bag beggars description, when a call came for her to go at once to a confinement. Not wishing the woman to lose a case because of my being there, I told her to make her necessary preparations while I talked. "Oh," she replied, "I am ready," and throwing a shawl over her head and seizing the bag, she was off—to take the life, the future health and well-being of a mother and child into her keeping.

"Again, foreign trained midwives who brought out the usual dirty bag for inspection would have, stowed away on top of a wardrobe, behind the stove, or under the bed, a most complete, compact, convenient portable sterilizer, which they had purchased at home and which the law there had compelled them to use. When asked the reason for not using it here the invariable reply was, 'It is not necessary, nobody cares what we use; the bag is handier, and everyone uses it here." * * *

"Out of the 500 midwives visited, less than 10 per cent. (fifty) could be be qualified as capable, reliable midwives. That there were even that many is a hopeful indication and an earnest of the class of women we might have in this profession if we took the proper method of raising the standard of midwifery practice. * * *"

The following table is taken from the same report:

500 MIDWIVES OF NEW YORK CITY: PERSONAL STATISTICS.

Nativity	Total	Length of residence in U. S.				Age				Education							Registration at Board of Health			Dependent upon practice		Condition of home & person	
										General				Professional									
		1 yr. or less	Over 1 yr. & less than 10 years.	10 yrs.-19 yrs.	20 yrs. & over	20 yrs. or less	21 yrs. to 34 yrs.	35 yrs. to 49 yrs.	50 yrs. & over	Able to read and write		Able to speak English		Foreign diploma	U. S. diploma (worthless)	No diploma	Correct	Incorrect	Not registered	Yes	No	Fair or good	Bad
										Yes	No	Yes	No										
Austria-Hungary	138	1	56	59	22	..	27	76	35	127	11	87	51	94	37	7	60	68	10	44	94	109	29
Italy	126	13	49	34	30	1	49	58	18	103	23	51	75	60	38	28	53	64	9	26	100	87	39
Germany	111	1	4	30	76	..	11	55	45	109	2	110	1	21	82	8	59	49	3	51	60	102	9
Russia	70	5	23	36	6	..	14	36	20	60	10	52	18	17	19	34	26	38	6	30	40	54	16
United States	23	..	....	...	23	..	6	13	4	22	1	23	....	....	21	2	9	9	5	11	12	18	5
Ireland	12	..	....	3	9	..	2	4	6	9	3	12	...	1	4	7	1	9	2	7	5	6	6
France	4	1	....	1	2	..	1	2	1	4	..	3	1	2	1	1	1	3	..	2	2	4	...
Sweden	3	..	....	2	1	..	...	2	1	3	..	3	...	1	2	...	1	2	..	1	2	3	...
Switzerland	2	1	....	...	1	..	1	...	1	2	..	2	....	....	2	...	1	...	1	1	1	2	...
Scotland	2	..	1	...	1	..	...	1	1	2	..	2	...	1	1	...	1	1	..	1	1	2	...
Syria	2	..	....	2	....	..	...	...	2	1	1	1	1	...	2	...	1	...	1	...	2	1	1
Turkey	1	..	1	...	....	..	1	...	...	1	..	1	....	...	1	...	1	...	..	...	1	1	...
Denmark	1	..	....	....	1	..	...	1	...	1	..	1	....	...	1	...	...	1	..	1	...	1	...
Belgium	1	..	....	...	1	..	...	1	...	1	..	1	....	...	1	...	...	1	..	...	1	1	...
Holland	1	..	....	1	....	..	...	1	...	1	..	1	....	...	1	...	...	1	..	...	1	1	...
Argentine Republic	1	1	....	...	....	..	1	....	...	1	..	...	1	1	....	...	...	...	1	...	1	1	...
England	1	..	1	...	....	..	...	1	...	1	..	1	....	...	1	...	1	...	..	...	1	1	...
West Indies	1	1	....	...	....	..	...	1	...	1	..	1	....	....	....	1	...	1	..	...	1	...	1
Total	500	24	135	168	173	1	113	252	134	449	51	351	149	201	211	88	214	249	37	175	325	394	106

THE MEDICAL PROFESSION.

It is difficult to over-estimate the efforts, extending over many years, which have been made by humane and progressive physicians to control this frightful disease. Painstaking investigations have been made, valuable statistics collected and tabulated, text books prepared, instruction given in class-rooms, hospitals and clinics, papers read at meetings of Medical Societies, publications prepared and distributed.

In all countries the disease prevails, perhaps less prevalent in our own than in other countries, but everywhere a scourge,* and wherever it prevails, in Great Britain, Germany, France and

*Snell reports to the British Medical Association that, of 333 inmates of the Sheffield School for the Blind, 137, or 41.14 per cent., had been blinded by Ophthalmia Neonatorum; the Henshaw School for the Blind (Eng.) reported, in 1908, that out of 200 children, 90 were blind from the same disease, or 45 per cent. Stephenson gives tables showing the percentages of Ophthalmia Neonatorum treated at Eye Hospitals, in Great Britain, Mexico, Spain, Portugal, France and the United States of America. (Pp. 11-12 "Ophthalmia Neonatorum," Stephenson.)

Italy, in Canada and in our own country, there devoted members of the medical profession are to be found, earnestly striving to cope with it.

To their efforts it is due that, in all of our best conducted Lying-in Hospitals and in the maternity wards of General Hospitals, the Ophthalmia of infancy has greatly decreased. As instancing one only of many similar well-managed institutions, it is satisfactory to know that, out of 4,000 births, during a period of six years, at the Sloan Maternity Hospital of New York City, where preventive methods are employed, not one case of Infant Ophthalmia had developed.

It is owing to this care, as a routine procedure, that we so rarely are saddened by the sight in our midst of a blind child—a child blinded by Infant Ophthalmia—for it is a mistake to suppose that this disease is confined to the poorer classes of society. It threatens the sight of the children of the rich as well as those of the poor; although, owing to superior medical care, the disease in the one case is immediately stamped out, in the other, owing to carelessness and ignorance, it is too often allowed to develop.

Much has been done by the medical profession. And yet—those tables of figures from the schools tell the story—tell us how much remains to be done. And no one knows so well as the doctors how great is the need of further effort. And they are making it. Within two years there has been in this country a distinct revival, the beginning of a crusade in behalf of the extermination of Infant Ophthalmia which, under the leadership of the American Medical Association—whose membership comprises the leading physicians of every State in the Union—is destined sooner or later to stamp out the disease and to save the sight of thousands of children yet unborn.

The work to be done has been entrusted by the American Medical Association to a Special Committee on Ophthalmia Neonatorum, through whose activity the movement is now being extended throughout the country. The plan of organization, as adopted by the Association, is that the Presidents of State Medical Societies shall appoint Special Committees on Ophthalmia Neona-

torum which shall be responsible for the work in their respective States, and which shall act in co-operation with the County Medical Societies and other Medical Societies of the State. Close co-operation is to be sought with Health Officers throughout the State, for only through the Departments of Health can the practical preventive work be done.

The following recommendations have been approved, in substance, by the American Medical Association and by the National Societies of Obstetricians and Ophthalmologists of the United States:

1. "The enactment of laws in each state or territory requiring the registry of births and placing the supervisory control and licensure of midwives in the Boards of Health."

2. "The distribution by Health Boards of circulars of advice to midwives and mothers, giving instructions as to the dangers, method of infection and prophylaxis of Ophthalmia Neonatorum."

3. "The preparation and distribution by the Health Boards of ampoules or tubes containing the chosen prophylactic, with specific directions for its use."

4. "To insist on the maintenance of proper records in all maternity institutions and other hospitals in which children are born."

5. "Periodic reports to Boards of Health by all physicians engaged in obstetrics of the number of cases of Ophthalmia Neonatorum that has occurred in their practice within a specified time, whether or not a prophylactic was used—if so, what—together with the result."

6. "Organized effort throughout the States."*

HEALTH OFFICERS.

There are 1,240 Health Officers in the State of New York, and as we look to them to give practical effect to the recommendations

*Report of the Committee on Ophthalmia Neonatorum to the House of Delegates of the American Medical Association, June, 1908.

of the medical profession, their attitude towards the present reform movement is of the utmost importance.

Fortunately the attitude of the most important of these officers, the State Commissioner of Health, with department headquarters at Albany, and whose jurisdiction extends over the entire State, is not in question. He was one of the first to respond to the recommendations of the American Medical Association, made in session last June, by pledging the support of the Department of Health of the State of New York to do all in its power for the suppression of Infant Ophthalmia. Three months later he outlined a plan of action which has received the approval of the medical societies of the State, and of the New York Association for the Blind. Among its provisions are:

1. The free distribution, by the State Health Department, to all local Health Officers—for use by physicians applying for the same, and by midwives as part of their prescribed equipment—of "Small containers of silver solution, of suitable strength, for use in the toilet of the new-born."

2. Birth certificates, in the future, will be required to state what preventive measures against Ophthalmia Neonatorum have been employed; or, if none, the reason therefor.

3. Circulars are to be issued, prepared by the Committee of the American Medical Association or approved by it, containing scientific facts of value to the profession; giving information to all midwives and to every professional nurse in the State; and inviting the co-operation of all medical societies.

The following is from the first circular issued by the State Department of Health (December, 1908). It is addressed to the Secretaries of all County Medical Societies:

"Dear Sir:

"A reading of one of the accompanying post cards will explain its immediate purpose. It is part of a movement originating with the American Medical Association, with the design of lessening blindness among children through the suppression of Ophthalmia Neonatorum.

"The agency chosen for the execution of the plan is the State Department of Health and the medical societies of the State and their component county societies, acting in co-operation. The share of the work allotted to the secretaries of the sixty county societies in the State, though not large, is very important, and the ultimate success of the movement will largely depend upon the thoroughness with which this part of the work is performed.

"The intention is to obtain an enrollment of every member of every county society of the State, which collectively will embrace the membership of the State society and thus of the entire profession of the State, pledged to the adoption of the Credé Method of prevention of Ophthalmia Neonatorum.

"The purpose of the enrollment is to secure for the sake of its moral weight, an impressive demonstration of a united action of the entire medical body upon a subject concerning alike the interests of humanity and the honor of the profession; and also to bind by a pledge, made to the profession as a whole, each individual doctor who practices midwifery."

Following is the post card referred to, which the Secretary of each County Medical Society is requested to send to each member:

"Ophthalmia Neonatorum causes one-fourth of all blindness among children, and one-eighth of all blindness from all causes.

"Ophthalmia Neonatorum may be prevented in almost every case by the instillation of a silver salt solution into the eyes of the new-born infant.

"A responsibility, almost criminal, of causing human blindness lies at the door of the practice of midwifery for its neglect to employ a prophylactic in every case of confinement.

"Hereafter all birth reports will contain the inquiry, Did you employ a preventive for Ophthalmia Neonatorum? If not, why not?

"For the convenience of doctors, nurses and midwives, health officers will in the near future distribute free, containers of a silver salt solution for use in the toilet of the new-born.

"A roster of all physicians in the State who are willing to employ a preventive is being compiled by the State Department of Health. I would like to have recorded the name of every member of our county society. Please sign the accompanying card, detach and mail it as soon as possible."

(Signed by the Secretary of County Medical Society.)

The return pledge is as follows:

"The undersigned, realizing the importance of the prevention of Ophthalmia Neonatorum, pledges himself, in the interests of humanity and for the honor of the medical profession, to personally adopt some approved method of prophylaxis in his obstetric practice and to use his influence to secure the co-operation of his professional associates to the same end."

(Signed by members of County Medical Societies.)

Should these pledges be given and observed by the medical profession of the State as a whole, the battle now being waged will be more than half won.

Scarcely second in importance to the attitude of the State Department of Health is that of the Health Department of the City of New York. The high standards maintained by this department have attracted the attention of foreign nations as well as our own. Only lately, last autumn, a medal was awarded the department by the International Tuberculosis Congress, in session at Washington, for its excellence in preventive tuberculosis work.

In 1902, the Health Officer of the City of New York declared Ophthalmia Neonatorum to be a contagious disease and, as such, required it to be reported promptly to the department by all physicians—thus taking the first step towards its ultimate suppression. The latest step taken is the publication, by the present Health Officer, in 1908, of a small book entitled: "Rules and Regulations Governing the Practice of Midwifery in the City of New York." As part of the equipment of the midwife, we find: * * * "One per cent. solution of nitrate of silver" * * * "Boric acid powder." * * * A physician must be summoned should a child develop "Swelling and redness of the eyelids with a discharge of matter from the eyes."

This little book, printed in English, German, Italian and Yiddish, is given to registered midwives in the City of New York when inquiry is made as to their qualifications. If the rules contained therein can be enforced, they should go far, very far, towards the extermination of Infant Ophthalmia in our great metropolis.

These important regulations have been issued by authority of, and in accordance with the provisions of Chapter 432 of the Laws of 1907, which vests in the Board of Health of the City of New York the "power and authority to adopt rules and regulations, and to adopt ordinances governing the practice of midwifery in the City of New York;" admission to practice; exclusion from practise; the regulation and inspection of midwives and the practise of midwifery generally. Violation of the rules is made a misdemeanor, to be punished accordingly.

Lack of space forbids mention of good work being done by Health Officers in other parts of the State. In Rochester, efficient service has been rendered by the Health Officer of that city, resulting in a noticeable diminution of Infant Ophthalmia; in Buffalo, much likewise has been accomplished. The Buffalo "Stop Blindness" posters, containing practical instructions, printed in English, Italian, German, and Polish have been widely distributed.

With so much being done, what need to do more?

Let this be the answer. Look into the pathetic faces of the little children who, each year, enter the Schools for the Blind. Realize that one-quarter of these children are needlessly blind; that, for years, this same proportion has continued; and is continuing, without diminution, year after year.

Surely, this leaves work enough to be done—by Health Officers, Medical Societies, the public generally.

THE PUBLIC.

It is a safe estimate that not more than five out of 50,000 persons have ever heard of the term "Ophthalmia Neonatorum," or have any idea what it means. If, when turning over the pages of an annual report of a State School for the Blind, one of them should come across the expression, in a list of long Latin names giving the causes of blindness, it conveys no meaning to his mind.

"Ophthalmia Neonatorum.....30,"

the line reads. Thirty children blind from Ophthalmia Neonatorum. This, to the casual reader, is but one of the many unavoidable, fatal diesases affecting the sight—apparently the most fatal—a deplorable fact to be accepted. It never occurs to him that this is a preventable disease, perhaps the most easily preventable of all diseases; that those thirty children need never have been blind; that

"Ophthalmia Neonatorum.....30"

should have no place on such a list—but stands there, a shameful record of somebody's ignorance or neglect when those children were born.

Or, he may visit the school on one of its public anniversaries, to see the little blind children go through their exercises; to hear them sing their songs and play on their little violins; to look at the sewing, the basket weaving, the broom making; to marvel at the perseverance and industry of the child, the patience and painstaking of the teacher; to admire and be thankful for all that has been done and is being done to make their lot more endurable; and yet—oh! all so sad! For the thought must come, that those little children have a lifetime of long darkened days before them. It never occurs to him that, of the 75 children there assembled, 25 of them should not be there, need never have been blind, never would have been blind had their eyes been properly washed and cared for when they were born—had a few drops of a simple solution been put into their eyes, taking two minutes to apply, costing two cents to obtain! (See page 39.)

It is the startling newness of this discovery, the horror of it when first realized, that is so bewildering. Why have we not known it before? And, knowing now, what can we do to end this appalling state of things? What can the public do?

The public, acting under the guidance of and in co-operation with the medical profession, can do *everything*!

For no movement in this country, if undertaken in the interest of humanity and based on sound principles, has ever failed of accomplishment, through the irresistible force of an enlightened public opinion, when that public opinion has been properly directed and controlled.

COMMITTEE ON THE PREVENTION OF BLINDNESS.

It was to make known the facts, to educate and organize public opinion, working in co-operation with and under the guidance of the medical profession, that, on the first of June, 1908, the New York Association for the Blind appointed a Special Committee on the Prevention of Blindness.

This Committee is composed of men and women; its Chairman is a lawyer. Among its members are the Chairman of the Committee on Ophthalmia Neonatorum of the American Medical Asso-

ciation, and the Health Officers of the State and City of New York —an earnest of co-operation already secured. On the Committee are members of the Ophthalmological and Obstetrical National Societies, and men and women representing various well-known philanthropic organizations of the City and State of New York. A close analysis would show Republicans and Democrats, Protestants, Catholics and Hebrews, all working together in behalf of a common object—that of the Prevention of Blindness.

The Committee purposes to direct its efforts at first towards the suppression of Infant Ophthalmia, an easily preventable disease, but which, according to the statistics, causes more blindness than any other. It is responsible for one-quarter of all cases of total blindness from birth, and for one-tenth of the whole number of the totally blind of all ages.

The methods of work for the suppression of Infant Ophthalmia, as planned by the Committee, are:

1. Educational;
2. Legislative;
3. Co-operative.

Educational.—Through the preparation, publication and dissemination of printed matter, emanating from the Committee or approved by it; through public lectures and addresses; and by means of the press—upon whose generous assistance the Committee greatly relies.

The object sought is to spread among the general public the knowledge that Infant Ophthalmia is a dangerous, infectious disease, fatal to sight unless checked at the time of the birth of the child, easily preventable then if simple precautions are taken; to inform parents, more especially, of the dangers which threaten the sight of their children at birth, and the preventive measures which should be taken; and to advocate the universal adoption of such measures.

Legislation.—To promote such legislation as may be needed to accomplish the object in view—the prevention of the unnecessary blindness of infants.

Co-operation.—In furtherance of the same object, the Committee seeks and invites co-operation with Medical Societies, Health Officers, Ophthalmic, Maternity and other hospitals in which children are born, Dispensaries, City Missions, Settlements; with Schools, Institutions and Associations for the Blind, and with all Societies engaged in work for children and for social betterment; with District Visiting Nurses, and with all persons who are already engaged in this work or who desire to help in it.

RECOMMENDATIONS.

The recommendations of the Committee are the same as those, already adopted by the American Medical Association, the Medical Societies of the State of New York, and by the State Department of Health. These recommendations, made in behalf of the suppression of Infant Ophthalmia, the Committee on the Prevention of Blindness adopts in their entirety; and earnestly desires fully to co-operate with the medical profession in its efforts to exterminate this disease.

The recommendations may be summarized as follows—with the addition of a few explanatory notes.

1. *Midwives.* The examination, licensing and registration of midwives by local Boards of Health, with power to revoke licenses at any time; power to require midwives to report annually in person for registration or to have their licenses renewed annually; to prescribe the outfit of midwives; to require strict conformity to the law relating to birth certificates; to have power to enforce such rules and regulations for the practice of midwifery as the Department of Health may adopt; and to require midwives immediately to report to the Department each case of Ophthalmia occurring under their ministrations, under penalty for neglect, if found guilty, of fine and, for a subsequent offense, forfeiture of license.

The necessity of providing a rigid examination as to the fitness of midwives who, in the City of New York alone, have the well-being of over 50,000 mothers and children annually in their keeping, comprising approximately one-half of the entire annual birth-

rate of the city, requires no comment. Whether the State Department of Health, or local Health Officers, or Board of Examiners for the entire State, should prescribe the course of study and conduct the examinations, is yet to be determined. In London, under the auspices of "The Association for Promoting the Training of Midwives," one of the Metropolitan hospitals gives a course of instruction to midwives, granting them certificates of efficiency.

The importance of an annual renewal of license, or an annual reporting in person by the midwife, is self-evident. Otherwise the Department loses sight of her, while the registry lists become clogged with names of persons who are dead, have moved away or who no longer practice.

2. *Circulars of Instruction,* to midwives, mothers and nurses, to be issued by Boards of Health, in regard to the care of the eyes of the new-born infant.

It is greatly to be desired that these circulars of instruction should contain similar directions, whether issued by the State Board or local Boards of Health. For distribution in large cities they should be in several different languages.

3. *Free Distribution of Prophylactics.* The preparation and free distribution by the State Board of Health to local Boards of Health, of small glass tubes, or ampoules, each containing a prophylactic (or preventive solution) the formula for which shall have been determined by the State Commissioner of Health, acting in co-operation with the Committee appointed by the American Medical Association and with representatives of the State Ophthalmological and Obstetrical Societies. These to be accompanied by specific printed directions for their use.

The consensus of opinion among ophthalmologists and obstetricians is that the chosen prophylactic should be a derivative of the silver salts, preferably a 1 per cent. solution of nitrate of silver. The small glass tubes, or ampoules, hermetically sealed by the glass-blower, made of colored glass to exclude the light (thus enabling the solution to preserve its efficacy indefinitely), and containing each the exact quantity to be used for the eyes of one infant,

are to be furnished gratuitously by the local Health Officers throughout the State, to physicians who may apply for them, and to midwives for obligatory use and as part of their prescribed outfit. Purity of the drug and accuracy of the dose will be secured by this means. The importance of furnishing the solution ready for use and free of cost to the ordinary midwife is self-evident.

It is estimated, by the Committee of the American Medical Association for this State, that the annual cost of providing a sufficient number of these ampoules, with directions for their use, for the entire State of New York, will not exceed $3,000.

4. *Registration of Births.*—The forms for certificates of birth to be issued hereafter by the State Board of Health will have printed upon them, in substance, as follows:

a. What preventive for Ophthalmia Neonatorum have you used for the child's eyes?

b. If none, state the reason therefor.

c. If no preventive measure has been taken, nor adequate reason for the omission given, and the child develops Ophthalmia Neonatorum, the law imposes a penalty for misdemeanor (fine or imprisonment, or both,) upon the responsible party, other than a legally qualified medical practitioner. (Chap. 325, Laws of 1892.)

d. Small glass tubes, containing the prophylactic adopted by the State Board of Health, will be supplied free of cost to physicians and midwives applying for the same, at the office of the ..... County Department of Health.

The above is a long step towards preventive measures. There is still another to be taken which, if adopted, will do more towards the suppression of Infant Ophthalmia than almost any other, for it should eliminate in large measure the effects of *carelessness* and *negligence.*

The present law requires certificates of birth to be sent to the Health Department within ten days of the birth of the child. Diminish this time to 24 hours, and the sight of hundreds of children will be saved, for the following reasons:

The negligent practitioner who has forgotten to use or to take with him his silver salts, the ignorant or careless midwife, is suddenly confronted with those questions on the certificate which he or she is obliged to answer and post within 24 hours of the birth of the child; she is also suddenly confronted with the possible penalty if anything should go wrong with the child's eyes. "It is not too late—the prophylactic shall be applied at once—it takes but two minutes." The certificate is filled out, signed and posted. No, it is not too late, the disease, if there, has been destroyed; ten days later—would be too late!

The importance of the early notification of births to health officers, for this and for other reasons, is attracting the attention of other countries than our own. By a recent Act of Parliament, entitled "An Act to provide for the Early Notification of Births" (Chap. 40, August 28, 1907), the father of the child, or any person in attendance upon the mother, is required to give notice of the birth of the child by posting a letter or postcard within thirty-six hours after its birth to the Medical Officer of Health of the district in which the child is born, a form of notice being provided for the purpose to physicians and midwives by the local authority.

5. *Records.*—The American Medical Association recommends that certain specified records be kept by physicians, and by all maternity institutions and other hospitals in which children are born. It also recommends widespread knowledge concerning Ophthalmia Neonatorum and its dangers.

LEGISLATION.

To give effect to the foregoing recommendations, made by the Medical Societies of this State, and by the State Department of Health, and by the New York Association for the Blind through its Committee on the Prevention of Blindness, the Legislature at its next session, should be requested to make the following provisions:

1. A general law concerning the practice of midwifery in this State—in substance upon the lines of the special laws already

enacted for New York City, the City of Rochester, and the Counties of Erie, Chautauqua and Niagara.

2. Authority to be conferred on the State Department of Health to enable the Department to prepare and distribute to local Boards of Health and to Health Officers, for gratuitous distribution to physicians and midwives, ampoules containing the prophylactic recommended by the State Commissioner of Health and by the Medical Societies of the State, with printed directions, to be used for the extermination of Infant Ophthalmia. Also an appropriation sufficiently ample to accomplish this object.

3. Such legislation as may be necessary to carry into effect the recommendations made in regard to the Registration of Births, and the form of Certificate of Notification to be issued by the State Department of Health.

4. An appropriation sufficient to enable the State Department of Health to prepare, publish and distribute printed matter in behalf of the suppression of Infant Ophthalmia.

5. Any other legislation which may be needed to give effect to the foregoing recommendations.

CONCLUSION.

It is not the purpose of this paper to speak of the measures to be taken after Ophthalmia Neonatorum has developed, and while it is still possible to save the sight of the child (supposing the disease, unfortunately, has not been exterminated on the day of its birth). Expert medical treatment should at once be sought, without an hour's delay, for none but a physician should *ever* attempt to treat this disease when it has once developed. Much important and very good work, in this direction, has been done in Massachusetts and elsewhere by transferring mother and child as soon as possible to an ophthalmological hospital—and such provision should be made in the larger cities of this State. For, only through the skillful treatment of an oculist and very careful nursing, can the sight be saved in even the early stages of this virulent disease.

It may have been noticed that no figures are given in this paper relating to the *cost of blindness.* Roughly estimated, the average cost to the State of a person, blind from birth and dependent through life, approximates $10,000. But the data obtainable are too incomplete, too unsatisfactory to warrant any positive accurate statement.

It may also have been noticed that the only statistics used by the Committee are those taken from the records of the causes of blindness in the reports of the Schools for the Blind. The schools are not obliged to keep such records—some of them do not—but these are the *only perfectly accurate statistics* we have, and *upon these this reform movement is based.*

Much more remains to be known. The census returns, carefully compiled, of 1906, give certain valuable figures; they do not give other facts and conditions which only authorized investigation can furnish, and without which preventive work—much needed preventive work—cannot be undertaken. For, in this age of trained philanthropic thought and action, when sentiment is followed by investigation, and investigation precedes reform, it is of the first importance that perfectly reliable information from official headquarters should be obtainable. In this State there is no such official headquarters; none charged with the specific duty of collecting information concerning blindness; of providing for the prevention of blindness; of promoting measures for the welfare of those who are both blind and dependent. In these respects we are lamentably deficient. Let us hope that New York may not much longer lag behind her two sister States of the East and of the West, Massachusetts and Ohio, in providing its own State Commission for the Blind, or by making some other appropriate legislative provision, the need of which, for this highly specialized form of work, is already apparent.

And yet, from even the present meagre outfit, from even these few reliable figures—furnished by the courtesy of the schools—enough is known to have kindled a great fire from the tiny spark, the light of which is spreading far and wide.

We close this paper by repeating the statement with which it opens: ONE-QUARTER OF ALL THE BLIND CHILDREN IN ALL THE BLIND SCHOOLS OF THIS COUNTRY ARE UNNECESSARILY BLIND.

Is the time coming when all children shall have their natural birthright of sight? When that little girl, with the wistful look in the sightless eyes, shall no longer be a type of the cruelty of ignorance and neglect, but will represent—not the present but the past.*

Not with the ignorant, not with those who do not know, rests the responsibility; but with those who *know*—and do nothing!

These last pages are written at Christmas time—the holy, happy time—when a little child was born, long years ago, in Bethlehem of Judea.

*See frontispiece.

APPENDIX.

Care that Should Be Given to the Child at Birth To Prevent Ophthalmia Neonatorum.

Immediately after the delivery of the head, before the delivery of the body, the eyelids should be carefully cleaned by means of absorbent cotton or a soft linen cloth and warm water that has been boiled, or boric acid (saturated) solution. A separate wipe should be used for each eye, and the lids washed, from the nose outward, free from all mucus, blood or meconium. All wipes should be burned after using. No opening of the lids should be attempted. At this time also the lips and nose should be in like manner wiped free of mucus, and the little finger, wrapped with a piece of moist linen, should be passed into the child's mouth and any accumulated mucus removed by an outward sweep of the finger. As soon after birth as possible, the eyelids should be again wiped clean of mucus, and two drops of a one per cent. solution of nitrate of silver should be dropped into each eye. One application, only, of the silver solution should be made, and ordinarily no further attention should be given the eyes for several hours.

Each time that the child is bathed, the eyes should be first wiped clean, as above described, with the boric acid solution. The hands of the person charged with the care of the child must be washed with soap and dried with a clean towel before the eyes of the child are touched. Everything that is brought near the eyes of the child must be, in every instance, absolutely clean.

The cotton that is used on the eyes of the child must, in every instance, be immediately burned after it is used. The water, towels, old linen and the cotton that have been used on the mother must, under no circumstances, be applied to the child. The air of the bedroom must be kept as pure as possible, and the linen should never be dried in the sick room.

What Must Be Done When Inflammation of the Eyes Appears.

When the lids become red and swollen, are gummed along their borders, when the child sleeps, or cries, and mattery dis-

charge is mixed with the tears, an oculist or a physician should be called immediately, or the child taken to the nearest dispensary. *Each hour of delay adds to the danger.* While waiting, bathe the eyes of the child every half hour with pledgets of cotton dipped in a solution of boric acid. Open the lids wide and allow the solution, which should be warm, to flood the eyes and wash out any matter which may have gathered there.

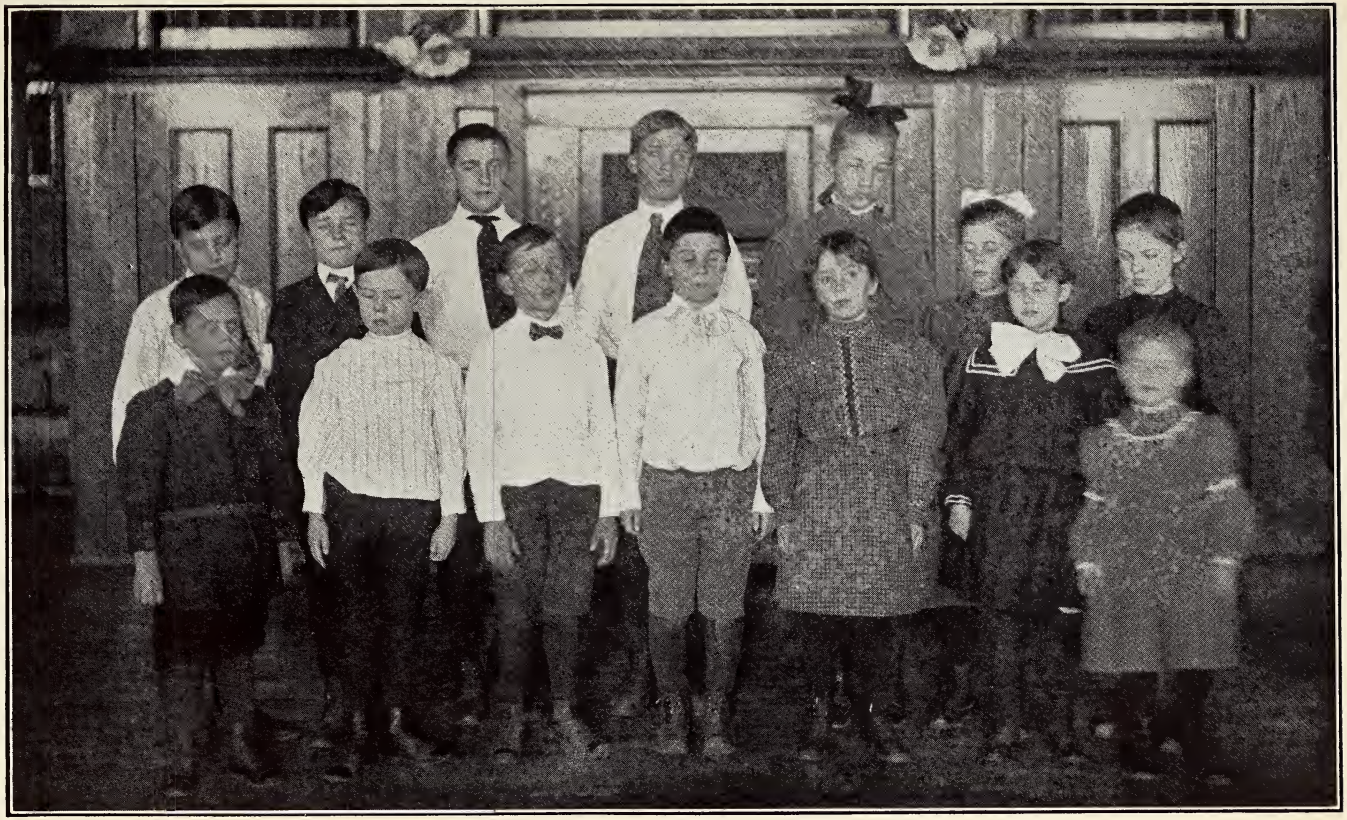
The child should not be fondled, and none of the appliances which have been used about the eyes or face should be used for any other purpose. All of those in the home should be informed of the danger of catching the disease by getting the matter into their own eyes. Do not listen to those who say it will amount to nothing, or to those who say to bathe the eyes of the child with the mother's milk. Such advice is pernicious, and will cause the loss of precious time by delaying the employment of means which might save the sight of the child.

"PLAYING ON THE BEACH." Both unnecessarily blind.

FIVE VICTIMS OF OPHTHALMIA NEONATORUM.

Out of twenty-two new pupils registered in the State School at Batavia, January 23d, 1906, these five are victims of ophthalmia neonatorum. Proper care at the proper time would have saved their sight.

BLIND FROM OPHTHALMIA NEONATORUM.
A typical case of total blindness, which proper care could have easily averted.



Fourteen children, Batavia, N. Y. All victims of Ophthalmia Neonatorum.

"What Are the Wild Waves Saying?"

Three victims of Ophthalmia Neonatorum—Sunshine Home for Blind Babies, Brooklyn, N. Y.

Blind from birth. Doomed to lifelong darkness.
Could have been easily prevented.

JUNIOR, PREPARATORY AND SENIOR CHOIRS.

Practically one out of every three of these seventy-five pupils of the New York State School for the blind at Batavia are there as a result of failure to care properly for their eyes soon after birth.